



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,616	09/05/2006	Hidehiko Oota	L5085.07114	2507
52989	7590	06/23/2008	EXAMINER	
DICKINSON WRIGHT PLLC			CHIEN, TIANJIE	
1901 L STREET NW			ART UNIT	PAPER NUMBER
SUITE 800			2627	
WASHINGTON, DC 20036			MAIL DATE	DELIVERY MODE
			06/23/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/591,616	<b>Applicant(s)</b> OOTA, HIDEHIKO
	<b>Examiner</b> Tianjie Chen	<b>Art Unit</b> 2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1,6,7 and 12 is/are rejected.
- 7) Claim(s) 2-5 and 8-11 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08) \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

***Non-Final Rejection***

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Objections***

2. Claims 2-4 are objected to because of the following informalities:

- In claims 2-4, line 2, “the coil spring is used as said resilient member,” should be deleted, respectively.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Sawi et al (US 5,774,445).

Claim 1, Sawi et al shows a chucking apparatus in Figs. 17 and 18 in which a plurality of pawl bodies 28 are provided in a radial direction of a hub body 25 of a turntable such that the pawl bodies can move, a center hole 17 of a disk is pressed by the pawl bodies to hold the disk, wherein

the chucking apparatus comprises a resilient member 26 (Column 7, line 46) for biasing the pawl bodies outward of the hub body,

each of the pawl bodies includes a pawl portion 28b which comes into contact with the disk, and a pawl-side stopper 28a for limiting outward movement of the pawl bodies caused by the resilient member,

the hub body includes a pawl opening 19 (Fig. 17) through which the pawl portion can project outward, and a hub-side stopper (the vertical wall of the notch wherein the element 28a is fitted in) which abuts against the pawl-side stopper, and

a coil spring 26 is used as the resilient member, and an outer end of the coil spring is provided at a location lower than an inner end of the coil spring (Figs 18a-18d).

4. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama (JP 11-306628).

Claim 1, Nakayama shows a chucking apparatus in Fig. 21 in which a plurality of pawl bodies 430 are provided in a radial direction of a hub body 410 (Fig. 16) of a turntable such that the pawl bodies can move, a center hole 9a of a disk is pressed by the pawl bodies to hold the disk, wherein

the chucking apparatus comprises a resilient member 440 for biasing the pawl bodies outward of the hub body,

each of the pawl bodies includes a pawl portion 433a (Fig. 19) which comes into contact with the disk, and a pawl-side stopper 431a (Fig. 21) for limiting outward movement of the pawl bodies caused by the resilient member,

the hub body includes a pawl opening 422 (Fig. 16) through which the pawl portion can project outward, and a hub-side stopper (the vertical wall against 431a) which abuts against the pawl-side stopper, and

a coil spring 440 is used as the resilient member, and an outer end of the coil spring is provided at a location lower than an inner end of the coil spring (Figs. 21 and 22).

Claim 6, as described above, Nakayama shows a chucking apparatus in which a plurality of pawl bodies are provided in a radial direction of a hub body of a turntable such that the pawl bodies can move, a center hole of a disk is pressed by the pawl bodies to hold the disk, wherein

the chucking apparatus comprises a resilient member for biasing the pawl bodies outward of the hub body,

each of the pawl bodies includes a pawl portion which comes into contact with the disk, and a pawl-side stopper for limiting outward movement of the pawl bodies caused by the resilient member,

the hub body includes a pawl opening through which the pawl portion can project outward, and a hub-side stopper which abuts against the pawl-side stopper, and

Nakayama further shows a receiving surface of a lower part with which a lower end surface of the pawl body comes into contact is formed such that a height thereof at which the lower end surface comes into contact is lower than a height (the height of the tip of the spring) on an inner end side of the coil spring.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamori (US 6,188,660) in view of Nakayama.

Claims 7 and 12, Yamamori shows in Fig. 5 a disk apparatus, wherein the disk apparatus comprises a chassis outer sheath including a base body and a lid, a front surface of the chassis outer sheath is formed with a disk inserting opening in which a disk is directly inserted, a traverse provided on the base body holds a spindle motor and a pickup, an upper surface of the spindle motor includes the turntable, and the traverse is moved toward and away from the base body.

Nakayama shows a chucking apparatus as described above and teaches that using the chucking apparatus would reduce burdens applied to a chucking mechanism or a recording/reproducing device for

recording medium disk during chucking (Section of PROBLEM TO BE SOLVED). One of ordinary skill in the art would have been motivated to use the chucking mechanism taught by Nakayama into Yamamori's device for reducing burdens applied to the recording/reproducing device for recording medium disk during chucking.

***Allowable Subject Matter***

6. Claims 2-5 and 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

- With regard to claims 2, 5, 8, and 11, Nakayama (JP 11-306628) shows a chucking apparatus in which a plurality of pawl bodies 430 are provided in a radial direction of a hub body 410 (Fig. 16) of a turntable such that the pawl bodies can move, a center hole 9a of a disk is pressed by the pawl bodies to hold the disk, wherein the chucking apparatus comprises a resilient member 440 for biasing the pawl bodies outward of the hub body, each of the pawl bodies includes a pawl portion 433a (Fig. 19) which comes into contact with the disk, and a pawl-side stopper 431a (Fig. 21) for limiting outward movement of the pawl bodies caused by the resilient member, the hub body includes a pawl opening 422 (Fig. 16) through which the pawl portion can project outward, and a hub-side stopper (the vertical wall against 431a) which abuts against the pawl-side stopper, and a coil spring 440 is used as the resilient member, and an outer end of the coil spring is provided at a location lower than an inner end of the coil spring (Figs. 21 and 22); the pawl body includes a rear end surface against which the outer end of the coil spring abuts, the rear end surface includes a first surface against which the upper portion of the coil spring abuts; **but fails to show** a second surface against which a lower portion of the coil spring abuts, and an angel

between the first surface and the second surface is changed such that a boundary portion between the first surface and the second surface becomes a convex portion.

- With regard to claims 3 and 9, Nakayama shows the coil spring is used as the resilient member, the pawl body includes a rear end surface against which the outer end of the coil spring abuts, the rear end surface includes a first surface against which the upper portion of the coil spring abuts; **but fails to show** a second surface against which a lower portion of the coil spring abuts, and the first surface and the second surface are substantially in parallel to each other and they have steps.
- With regard to Claims 4 and 10, Nakayama shows that the coil spring is used as the resilient member, the pawl body includes a rear end surface against which the outer end of the coil spring abuts, the rear end surface includes a first surface against which the upper portion of the coil spring abuts, **but fails to show** and a second surface against which a lower portion of the coil spring abuts, an axial direction of the coil spring in a state where the coil spring is in abutment against the first surface and an axial direction of the coil spring in a state where the coil spring is in abutment against the second surface are different.

***Conclusion***

7. The prior art made of record in PTO-892 Form and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tianjie Chen/

Primary Examiner, Art Unit 2627